ABSTRACT

"ROLE OF HIGH RESOLUTION ULTRASONOGRAM AND ELASTOGRAPHY IN CERVICAL LYMPHADENOPATHY"

INTRODUCTION:

Cervical lymphadenopathy is one of the most common clinical condition in our country.It may be due to various causes - infection like tuberculosis / malignant conditions like metastasis or reactive to other inflammatory conditions for which it is mandatory to differentiate them to aid in the proper management.

AIM AND OBJECTIVE:

To evaluate the role and diagnostic utility of ultrasonogram and elastography to differentiate the infective/ reactive and malignant causes of cervical lymphadenopathy.

MATERIALS & METHODS:

It is a Prospective study of 85 patients with cervical lymphadenopathy done between September 2016 to september 2017.

Conventional B-Mode Ultrasonogram and Doppler study of cervical lymph nodes is done for all patients using SAMSUNG ACCUVIX XG AVXGE30/IN ultrasonogram machine equipped with elastoscan, with compatible high frequency linear probe(7-11Hz). Radiological diagnosis is given on the basis of size, shape, short to long axis ratio, echogenicity, fatty hilum and presence of hilar or peripheral blood flow. Strain elastography is done using the same machine and same probe and the

scores of elastography is given from 1 to 5. Results are correlated with USG findings and final diagnosis given. Biopsy/FNAC is done for all cases and the results are compared.

RESULTS:

Among 85 nodes in our study, 26 nodes were benign, 37 nodes were malignant and 22 nodes were reactive constituting 30.6%, 43.5% and 25.9% respectively.

CONCLUSION:

The real time strain elastography can distinguish benign and malignant cervical lymph nodes with high sensitivity and specificity. On combining elastography with B-mode ultrasonogram, the sensitivity to differentiate benign and malignant nodes will increase to 100% and specificity will also be very high.

KEY WORDS:

Elastography, Cervical lymphadenopathy, Strain elastography, Differentiation of benign and malignant nodes, Strain index, Short to long axis ratio.